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| APPLICATION NO | . 1 | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|------|-------------------------|----------------------|-------------------------|------------------|
| 10/039,059 12/31/2001 | | 12/31/2001 | Ton Logtenberg | 313632000801 | 9790 |
| 25225 | 7590 | 05/18/2004 | | EXAMINER | |
| | | ERSTER LLP TRE DRIVE | LEFFERS JR, GERALD G | | |
| SUITE 500 | | IKE DRIVE | ART UNIT | PAPER NUMBER | |
| SAN DIEGO, CA 92130-2332 | | | | 1636 | |
| | | | | DATE MAILED: 05/18/2004 | 1 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| A |
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| 07 |

Office Action Summary

| Application No. | Applicant(s) | | |
|---------------------------|-------------------|--|--|
| 10/039,059 | LOGTENBERG ET AL. | | |
| Examiner | Art Unit | | |
| Gerald G Leffers Jr., PhD | 1636 | | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
- after SIX (6) MONTHS from the mailing date of this communication.

 If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.

 If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this con

| - Failure Any re | period for reply is specified above, the maximum set or reply within the set or extended period for reply ply received by the Office later than three months dipatent term adjustment. See 37 CFR 1.704(b). | v will, by statute, cause the app | lication to become ABANDONED (35 U.S.C. § 133). mmunication, even if timely filed, may reduce any | | | | |
|---|---|-------------------------------------|--|--|--|--|--|
| Status | | | | | | | |
| 1)[1 | Responsive to communication(s) fil | ed on <u>01 <i>March 2004</i></u> . | | | | | |
| 2a)☐ ⁻ | This action is FINAL . | 2b)⊠ This action is n | on-final. | | | | |
| 3)□ 3 | Since this application is in condition | n for allowance except | for formal matters, prosecution as to the merits is | | | | |
| (| closed in accordance with the pract | tice under <i>Ex parte Qu</i> | ayle, 1935 C.D. 11, 453 O.G. 213. | | | | |
| Disposition | on of Claims | | | | | | |
| 4)🛛 (| Claim(s) <u>1-23</u> is/are pending in the | application. | | | | | |
| 4 | a) Of the above claim(s) <u>17-21</u> is/a | re withdrawn from co | nsideration. | | | | |
| 5) 🗌 (| Claim(s) is/are allowed. | | | | | | |
| 6)⊠ (| 6)⊠ Claim(s) <u>1-16,22 and 23</u> is/are rejected. | | | | | | |
| 7) 🗌 (| 7) Claim(s) is/are objected to. | | | | | | |
| 8) 🗌 (| Claim(s) are subject to restri | ction and/or election r | equirement. | | | | |
| Application | on Papers | | | | | | |
| 9)∐ T | he specification is objected to by the | ne Examiner. | | | | | |
| •— | he drawing(s) filed on is/are | | | | | | |
| | • • | | be held in abeyance. See 37 CFR 1.85(a). | | | | |
| | • | | ed if the drawing(s) is objected to. See 37 CFR 1.121(d). ote the attached Office Action or form PTO-152. | | | | |
| Priority u | nder 35 U.S.C. § 119 | | | | | | |
| 12)⊠ A | Acknowledgment is made of a claim | n for foreign priority un | der 35 U.S.C. § 119(a)-(d) or (f). | | | | |
| a)[∑ | ☑ All b) ☐ Some * c) ☐ None of: | | | | | | |
| | 1. Certified copies of the priority | documents have bee | n received. | | | | |
| 2. Certified copies of the priority documents have been received in Application No. 09/418,563. | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | |
| | application from the Internati | onal Bureau (PCT Rul | e 17.2(a)). | | | | |
| * Se | ee the attached detailed Office acti | on for a list of the certi | fied copies not received. | | | | |
| | | | | | | | |
| Attachment(| · · | | | | | | |
| | of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (| PTO-948\ | 4) Interview Summary (PTO-413) Paper No(s)/Mail Date | | | | |
| | ation Disclosure Statement(s) (PTO-1449 o | | 5) Notice of Informal Patent Application (PTO-152) | | | | |

Paper No(s)/Mail Date 1/6/2002.

6) 🔲 Other: _

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DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I (claims 1-16 and 22-23) in the paper filed 3/1/2004 is acknowledged. Claims 17-18, 19-21 are withdrawn from consideration as being directed to nonelected inventions.

Priority

It is noted that the transmittal papers submitted 12/31/2001 indicate that the instant application is a continuation of U.S. Application Serial No. 09/069,534, filed 4/30/1998. It appears that this indication of a claim for priority to the '534 application is inadvertent as there is insufficient support in the '534 application for the invention recited in the elected claims. Moreover, the claim for priority was not made in the first sentence of the specification or in an application data sheet. Therefore, priority is only granted under 35 U.S.C. 120 to U.S. Patent Serial No. 09/418,563, now U.S. Patent No. 6,440,736 and filed 10/15/1999.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 and 22-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Each of the claims recites the term "derived from" in the context of cell membranes and portions of first and second proteins. The term "derived from" implies an indirect process, making it unclear the nature and number of steps required in order to obtain a "derivative" of a protein and/or membrane. It would be remedial to replace the term "derived from" with the term "obtained from", which implies a more direct process for obtaining the desired products.

Claim 22 is vague and indefinite in that meets and bounds of the term "obtainable from" are unclear. It is unclear the nature of the conditions and steps under which the desired cell or particle are "obtainable" from the process of claim 1. Further, it is unclear as the claim is written whether one must actually practice the steps of claim 1, or whether the cited phrase merely means that the product can be obtained from the process of claim 1 and can actually be produced by some other, undefined process.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claims 1-16, 22 and 23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 6,440,736.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the processes recited in the issued claims of the '736 patent are specific embodiments of the more broadly claimed methods recited in the instant claims. Therefore, the claims of the '736 patent anticipate and make obvious the instant claims. Both sets of claims are directed to providing a cell or cellular membrane comprising an additional proteinaceous molecule where the proteinaceous molecule is a modified lipoprotein comprising a portion of a first polypeptide operatively linked to a lipidation signal of a portion of a second polypeptide. The issued claims are more explicitly directed to embodiments where the presence of the modified lipoprotein of alters the characteristics of the cell and/or membrane in which it has been introduced.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-5, 7-9, 11-12, 14-16, 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Tykocinski et al (WO 96/12009 A2; see the entire reference).

The Tykocinski et al application teaches methods for engineering antigen presenting cells by altering the cells to include a modified MHC protein whose antigen-binding characteristics are defined (e.g. Abstract). Specifically, the application teaches embodiments where glycosyl-

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phosphatydylinositol (GPI) modification of the desired MHC protein is achieved through the operative linkage of a GPI-signaling motif is operatively linked to the amino acid sequence of the MHC by recombinant means (e.g. page 4, lines 34-36; pages 5-6, bridging paragraph; page 8, lines 25-32; page 14, lines 3-16 and lines 28-31; page 15, lines 15-19; Example 1, pages 30-33). Therefore, Tykocinski et al teach a process for providing a cell or cell membrane with an additional proteinaceous molecule, the process comprising contacting the cell or membrane with a lipid-modified proteinaceous molecule, where the lipid-modified proteinaceous molecule comprises at least one protein moiety derived from a first protein and at least one lipidation signal derived from a second protein.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald G Leffers Jr., PhD whose telephone number is (571) 272-0772. The examiner can normally be reached on 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel can be reached on (571) 272-0781. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gerald G Leffers Jr., PhD Primary Examiner Art Unit 1636

GERRY LEFFERS
PRIMARY EXAMINER